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BULLETIN OF THE UNIVERSITY OF TEXAS

No. 43

ISSUED SEMI-MONTHLY

General Series No. 7

October 1, 1907

THE CONSOLIDATION
OF
RURAL SCHOOLS
WITH AND WITHOUT
TRANSPORTATION

BY

UNA BEDICHER AND GEORGE T. BASKETT

Under the Direction of A. CASWELL ELLIS, Associate Professor of the Science and Art
of Education, The University of Texas.



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Under the Direction of A. CASWELL ELLIS, Associate Professor of the Science and Art
of Education, The University of Texas.

By the Consolidation of Rural Schools is meant the discontinuance of several small one-teacher schools within a given district or neighborhood, and the maintenance instead of one larger school, with several teachers, at some point near the centre of this area. When this central school takes the place of a large number of small schools, or when the area ministered to by this one school is very large, the pupils from those parts of the district far removed from the school house are transported to and from school in wagonettes at the public expense. The wagonette hire and drivers' salaries are paid out of school funds just as are teachers' salaries or fuel bills. Experience has shown that this expense can usually be met without any increase in appropriation, out of the amount saved through the greater economy in running one large central school instead of four, five or six scattered little schools. When only two or three schools are consolidated and when none of the pupils are placed thereby at great distance from the central school, free transportation need not be provided.

This plan of transporting pupils at public expense from outlying districts was first authorized in Massachusetts in 1869, where they found that it was cheaper to transport the pupils in the country to the well established village schools than to support even a poor grade of separate country school. In other States the rural districts which have no central village soon adopted the plan of consolidating their own little scattered rural schools, sometimes with, sometimes without transportation. Among the states now practising consolidation are Massachusetts, New Hampshire, Vermont, Maine, Connecticut, New Jersey, Pennsylvania, Virginia, West Virginia, North Carolina, Georgia, Florida, Ohio, Indiana, Wisconsin, Michigan, Minnesota, Missouri, Iowa, Idaho, Kansas, Nebraska, and North Dakota. It is practised also in Victoria, Australia, with great advantage. In all these states it has proved successful and is rapidly spreading.

REASONS FOR CONSOLIDATION OF SCHOOLS.

The majority of our rural schools are taught by young, inexperienced*, and often poorly educated,† and inefficient teachers, working in little

*The average length of service of rural teachers in Texas is less than 4 years of 4½ months each, or a total of 18 months. About 3000 new teachers are taken into our schools each year.

†Of the 10,244 white teachers in rural schools in Texas 5737 have second grade and 506 have third grade certificates. Even a first grade certificate demands a bare high school education.

one-room school houses with practically no library, maps, charts, or other school equipment. These teachers must conduct from twenty-five to thirty-five recitations a day in all subjects, ranging from A, B, C's to Algebra. As a result, our rural schools, with a few notable exceptions, are truly wretched. Furthermore, with the present poor pay, and with the impossible task imposed upon the rural teacher, we can hope for little improvement in the quality or training of those undertaking this hopeless labor. Even if we could have every rural teacher better than the few best ones now are, the well-nigh complete absence of equipment and the endless round of lessons each day necessitated by having all grades of pupils under one instructor would paralyze the best teacher. If any plan can be found which will even partially obviate these difficulties without entailing an expense beyond what the present schools cost, or beyond what our people are willing to contribute for improved schools, it should have our most earnest consideration.

ADVANTAGES OF CONSOLIDATION.

The experience with consolidation elsewhere has shown that it does accomplish the following results:

1. Better school buildings and equipment can be secured. It is cheaper to build and keep up one four or six-room house than four or six one-room houses. Experience has shown, too, that the community pride in a large, successful school will bring better financial support.

2. The expense for teachers is less. The most extravagant plan possible is to have one teacher teaching children of all ages, often hearing fifteen or twenty small classes a day with only one, two or three pupils in each class. Several times this many pupils could be taught in each class just as well as not. There would be few more classes in a consolidated school of a hundred and fifty pupils than there are in a one room school of twenty-five pupils. By combining six such schools the work could easily be much better done by four teachers, and still give three times as much time to each class, thus saving the cost of two teachers and giving better service at the same time. Even where the single teacher schools are crowded with sixty or eighty pupils, as many are in Texas, consolidation would still be valuable, for four teachers can handle two hundred and forty pupils far better in a well classified school than one can handle sixty in an ungraded school. As a matter of fact there are in Texas over 6000 one teacher white schools. There are 533 with less than twenty pupils enrolled, and ninety-six with less than ten.* If we had taken actual attendance instead of enrollment, the number with less than twenty or less than ten pupils would have been much larger. In some places in Texas the length of the school term could be actually doubled without any additional cost if consolidation were practised.

3. Better teachers can be secured, because of the increased pay, or

*These figures are exclusive of independent districts and community counties. Furthermore a few counties had not reported at the time these statistics were gathered. These figures were gotten by a careful compilation from the county reports in the office of the State Superintendent of Public Instruction, but the correct number in each case is undoubtedly far above that given here. Our Legislature and our county officials have not yet learned the value of statistics, and have made it wellnigh impossible for an investigator to find out the facts.

the increased length of school term, or because of the fact that the work with a smaller number of classes and in company with several fellow teachers is far more stimulating and attractive.

4. There is possibility of intelligent supervision of teachers, which is now impracticable, with dozens of little schools scattered all over each county.

5. With a larger area to draw from, better trustees are more likely to be secured. The possibility of one prominent family "running" the school and bulldozing the teacher is also lessened.

6. Better grading and classification of the pupils is possible. As mentioned above, there is almost as great variety of pupils in a school of forty as one of a hundred and sixty, and hence the one teacher must, in order to get along at all, throw together in the same class pupils of very different knowledge and ability. With four teachers to conduct classes there is greater opportunity for providing a class to fit each pupil's stage of advancement.

7. Larger classes, if not too large, add to the interest of pupils and teachers. The higher classes especially need this at present in our rural schools. The one or two pupils in these classes have little stimulus to higher work. The presence of a larger number of advanced pupils and the possibility of giving these the needed attention will serve to broaden the life of the larger boys and girls and hold them in the school.

8. Each teacher will have fewer classes and hence longer time to devote to his own preparation and to the teaching of each lesson.

9. With four or six teachers in one school it will be possible to add other subjects and enrich the curriculum. One teacher could teach manual training along with mathematics or some of the sciences. The rudiments of agriculture, horticulture, etc., along with nature study, have been taught with great success in some of these schools in the middle west. With nature's laboratory free at the door, and land almost free, and with fairly good text books on agriculture now published, there is no reason why our farmers' boys should not be prepared in school to carry into the work of agriculture the same training and scientific knowledge which have improved upon and displaced rule of thumb methods in other fields of human endeavor. The splendid work done in the agricultural high schools of Minnesota shows that this is entirely practicable*.

If to consolidation transportation is added, as is necessary where many single schools are combined into one, the following additional advantages arise, as has been shown in actual experience:

1. The attendance is more regular and tardiness is eliminated.

2. The attendance is larger.

3. Pupils are healthier. They do not have to walk through mud or rain and then sit in wet shoes all day.

4. The pupils are under the care of some responsible person all day, and hence the girls are protected on the way to and from school, and the boys are removed from the temptation to quarrels and other misconduct on the way to and from school.

*The University has nearly ready for publication a bulletin giving full account of the methods employed in teaching agriculture in the public schools, showing what has been done elsewhere, and how, and outlining a plan for courses in our own schools. This will be sent free on request.

5. The central building with its assembly room, library and piano affords a social and intellectual center for the community. The same wagonette which carries the children to school in the day may bring the parents together at night or on Saturday for school entertainments, public lectures, debating clubs, or farmers' institutes.

In short, the consolidated rural school brings to the country that thing the absence of which has driven so many families to town and so many boys off the farm, namely a well classified, well equipped, well taught school. It will be no longer necessary for the well-to-do farmer to move to town to educate his children, nor will he need to spend his money on boarding schools and subject his boys to the moral dangers arising from life in a city away from parental care. The consolidated rural school will enable parents to furnish their children a first class school, and at the same time keep them in their own home under their own care, where they may be of service to the home, and receive that part of education which the home alone can give.

OBJECTIONS AND DIFFICULTIES.

As might be expected, human ignorance and human selfishness have always led people to oppose the consolidation of schools when first proposed. To those local tyrants who are determined to run things their own way, or to those who think that their friend or kinsman must be furnished a little school to teach regardless of the welfare of the children or of the community, nothing can be said. The power of the local tyrant is undoubtedly lessened by consolidation, and the more incompetent ones of the local teachers will be the first to lose their jobs. The sentimental objection to closing the little school house down the lane will likewise be unaffected by rational considerations. Other objections based on neither greed nor sentiment are brought which deserve consideration. It is urged against consolidation:

1. It is too expensive. In answer to this it can be said that as a matter of fact the expense per pupil has been reduced more often than increased, in spite of the fact that a better school has been provided and the cost of transportation is added. In the quotations given later there is one case in which consolidation reduced the cost from \$16.00 to \$10.48 per pupil enrolled, in another from \$5.03 to \$2.31, and gave a better school because of more intelligent plan of organization. Other cases may be seen in the quotations given later in this bulletin. It has been pointed out above why the expense for both teachers and buildings may be actually lessened.

2. The farms, remote from the central school, will depreciate in value. As a matter of experience, the value of the farms, as far as we have found, had invariably increased in the entire district. Certainly the presence of a good school should add to the value of property within the entire range of free transportation.

3. Pupils in going so far to a central school have to leave home too early and return too late, or they are too much exposed to weather in the long drives to and from school, or are in danger from immoral drivers. As a matter of fact, it takes no longer to ride three or four or five miles—the greatest distance for the most distant pupils—than to walk half that

distance, which is frequently done. Careless or immoral drivers are a real danger which must be carefully guarded against. To insure comfort and safety in conveyance the rules governing transportation should require a rain proof wagonette, with plenty of robes, a safe team and reliable driver. The drivers should be as carefully chosen as the teachers. Frequently some of the parents do this work, or some older responsible pupil acts as driver and is thus enabled to remain in school and complete the course. The driver calls at each home at a fixed time and is required to start and complete his work at fixed hours. In all the districts we have studied 7:15 is the earliest hour at which a driver called for a pupil. In this case the pupil lived five and a half miles from the school. Experience has shown that pupils get home earlier and more safely in this way than under the present plan.

4. There is lastly a natural fear that our country schools may get too large classes, become too mechanically graded, as are many city schools, and crush out the individuality of the pupils, to which the old country school gave such opportunity for development. It is a fact that many strong personalities have come from our old-field schools. In a one-teacher ungraded school each individual gets so little attention and aid from the teacher that the pupil is left pretty much to educate himself, or not, as he chooses. In cases of geniuses this may be an advantage. Geniuses are possibly as often retarded as helped by teachers, and since in the one teacher school the pupil gets less help from the teacher, the individual genius can better go his own gait. However, most pupils are not geniuses and are helped by teachers, else we should never have schools at all. If we are to have them at all, let us organize them so that the teachers can best teach their pupils. It is not at all necessary for the consolidated rural school to organize and grade the life out of itself. The rural schools have the advantage of the experience of the city schools and need not repeat their errors. The problem of respecting and developing individuality in large well classified schools has been well met in many places by wide awake and thoughtful teachers even in cities, where the task is far more difficult than it ever will be in the country. Experience again has shown here, what reason foretold, that the consolidated school not only does not crush out the individuality of the pupil, but, on the contrary, the bright pupil in the larger country school, where all the boys of a whole district are gathered, has better opportunity for development of his special talent because of the stimulus and inspiration coming from contact with other bright minds of his own age.

There are just two very genuine difficulties in the way of consolidation: namely, bad roads and sparse population. These make it entirely impracticable in many parts of Texas at the present time. But even after we eliminate all this vast area there remain hundreds of districts in the State in which consolidation is entirely feasible and urgently needed. Texas is a whole empire in itself, presenting all educational problems and all classes of conditions. There are enough places ready for consolidation to occupy our best efforts for several years, after which many more places will be ready, for it is a matter of only a few years when roads will be built even in the black lands.

THE SITUATION IN TEXAS.

With over 6000 one-teacher white schools, with more than 600 schools enrolling less than twenty pupils, and over 100 enrolling less than ten, Texas would seem to offer a large field for Consolidation of Schools. If, in connection with this fact, one but considers the utter absence of equipment and the interminable list of lessons which must be heard each day by the teacher in each of the one-teacher schools, the need for consolidation becomes too obvious for discussion. For the enlightenment of those not familiar with the hopeless task now set many of our rural teachers, we give here two samples of the daily programs in actual operation.

A MILAM COUNTY ONE-TEACHER SCHOOL, DAILY PROGRAM.

Singing	8:45 to	8:55.
Roll call	8:55 to	9:00.
Spelling class, A.	9:00 to	9:05.
Spelling class, B.	9:05 to	9:10.
Chart class	9:10 to	9:20.
First Reader	9:20 to	9:30.
Higher Arithmetic	9:30 to	9:45.
Lower Arithmetic, No. 1.	9:45 to	10:00.
Lower Arithmetic, No. 2.	10:00 to	10:15.
Recess	10:15 to	10:30.
Chart class	10:30 to	10:35.
First Reader	10:35 to	10:45.
Second Reader	10:45 to	10:55.
Civil Government	10:55 to	11:05.
Third Reader	11:05 to	11:20.
Fourth Reader	11:20 to	11:35.
Texas History	11:35 to	11:50.
United States History	11:50 to	12:05.
Noon recess	12:05 to	1:05.
Number class	1:05 to	1:15.
Chart class	1:15 to	1:25.
First Reader	1:25 to	1:35.
Elementary Geography	1:35 to	1:50.
Grammar School	1:50 to	2:00.
Physical Geography	2:00 to	2:15.
Second Reader	2:15 to	2:25.
Hyde's Language Lessons, I.	2:25 to	2:40.
Hyde's Language Lessons, II.	2:40 to	2:55.
Recess	2:55 to	3:10.
Chart class	3:10 to	3:15.*
First Reader	3:15 to	3:25.

Physiology, 2d book	3:25 to 3:40.
Physiology, 1st book	3:40 to 3:50.
Spelling, B	3:50 to 3:55.
Spelling, A	3:55 to 4:05.
Writing, whole school	4:05 to 4:20.

A total of thirty-two lessons, ranging from A B C's to Physical Geography and Civil Government.

Another one-teacher school program in daily operation:

Writing, 8:50 to 9:00.

U. S. History.

Texas History.

General History.

First Reader.

Second Reader.

Third Reader.

Fifth Reader.

Recess, 10:20 to 10:30.

Higher Arithmetic.

Third Arithmetic.

Second Arithmetic.

First Arithmetic.

Grammar (Sisk).

Grammar (Hyde).

Language.

First Reader.

Noon recess, 12:00 to 1:00.

Rhetoric.

First Reader.

Physiology (Conn).

Physiology, Lower.

Physical Geography.

Second Reader.

Third Reader.

Political Geography.

Elementary Geography.

Higher Algebra and Elementary Algebra (at same time).

Recess, 2:50 to 3:00.

First Reader.

Civil Government.

Geometry.

Higher Speller.

Second Speller, definitions.

Dismiss.

Here is a teacher actually attempting to teach each day: three different history classes; nine reading classes; four arithmetic and two algebra classes; two grammar, one language, one rhetoric, and two spelling classes; two classes in geography, and one in physical geography; two classes in physiology and one in civil government; making a total of thirty-one classes, covering almost a complete primary and grammar school curriculum with a few high school subjects added. The task is

manifestly an impossible one. It is from three to five times what is expected of good teachers in our best city common schools, where usually only one grade of lessons is taught by one teacher, or in the high schools, where one teacher usually teaches only one, two or three subjects.

The above daily programs give no exaggerated impression of the difficulty usually present in the one-teacher schools in Texas.

In order to introduce consolidation in Texas there is fortunately no new law required. The number and location of schools within any district are entirely within the control of the trustees of said district; hence, all the legal procedure necessary for consolidating, either in whole or in part, the schools within any district is that the trustees so order it.¹ If wider consolidation is desired, two or more adjacent school districts may, by vote of a majority of the qualified voters of each district and with the approval of the county superintendent, be consolidated.² In places where complete consolidation of neighboring districts is not feasible the well-known transfer law will usually cover all needs when establishing central consolidated schools near a district line.³

It will be necessary in each case where a large new building is demanded, or where transportation is needed, that the expense of building and of transportation be met by local tax, since the State funds can be used only for the payment of teachers, of the treasurer and of the census taker. This small local tax must be raised, under the present or any other system, if our schools are ever to be worthy of the name. There are now in Texas more than 2050 districts levying a local tax, and the number is rapidly increasing. The rapid progress of this movement in the last few years is a most hopeful sign. The number of districts levying a local tax has increased 130 per cent within three years. The large central school fund in Texas came near becoming a menace to the advance of our schools, in leading many of our citizens to think that no local tax is necessary. As a matter of fact, the State funds provide only about \$5 per year for each child, whereas in the better educated States from \$20 to \$38 per year per child is provided, largely through local taxation. Of all the funds expended on public schools in the United States as a whole, 80 per cent is derived from local taxation, while in Texas as yet only about 33 per cent is raised by local tax. A moment's consideration will show how hopeless is the situation without local tax. Forty pupils are a large number for one teacher even in a well-graded school. This number at \$5 per pupil would furnish just \$200 per year—a salary not likely to command a very high order of teacher. The local tax is an absolute necessity under any plan. The amount of local tax which would be demanded to establish good rural schools under the present wasteful plan would be very great, but under a rational system of consolidation the tax demanded for really good schools need not be burdensome. Where a district is "Independent" and can issue long-time bonds, the expense of

¹See Sec. 57, School Laws of Texas, 1901. (Art. 3959, Revised Statutes.)

²See Sec. 42, School Laws of Texas, 1901. (Art. 3938, Revised Statutes, as amended by the 26th Legislature); also Sec. 44, for County Line District (Art. 3946 (a), Revised Statutes).

³See Secs. 87 and 88, School Laws of Texas, 1901. (Art. 3982, Revised Statutes, and Art. 3934, Revised Statutes.)

a large four or six-room consolidated school building is easily met.¹ As will be shown later on, the only legislation needed is the removal of the present restriction upon incorporation and issuance of bonds for school purposes, so that strictly rural communities may have the same privilege now enjoyed by those districts containing a village of 200 inhabitants.

Three thousand dollars in thirty-year 5 per cent bonds will cost \$150 the first year for interest, and \$100 per year sinking fund, the interest growing \$5 less each year for thirty years. Thus \$250 would be the cost the first year, and \$105 the last year for this \$3000 school building.

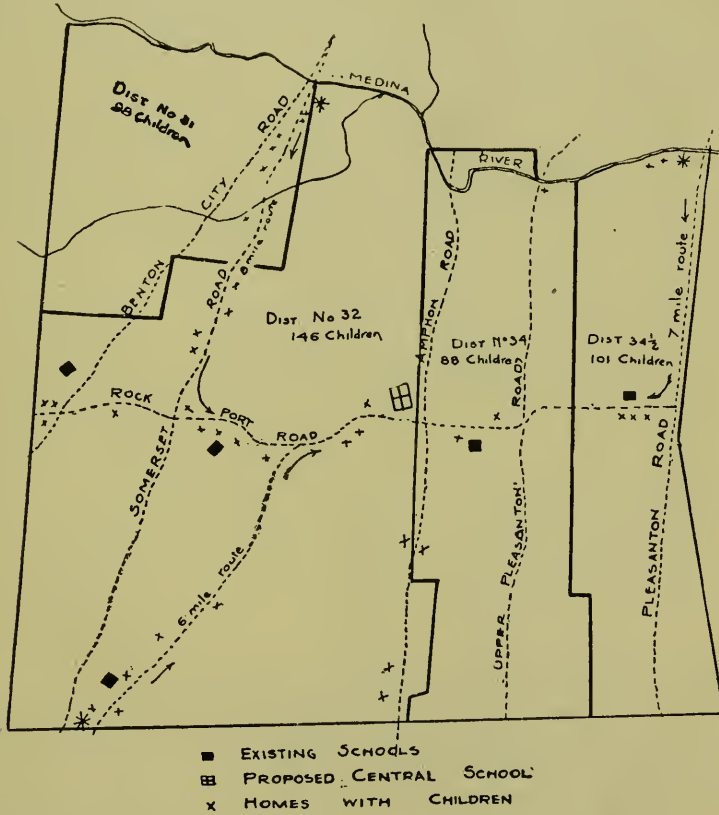


Diagram No. 1 representing a district in Bexar County needing Consolidation of Schools.

The cost of maintenance would, of course, depend upon local conditions. As examples of what might be done in hundreds of districts in Texas, we give facts, with charts, for several districts of which we happen to know. It is not claimed that these are the best places in which to begin consolidation in Texas. There are probably many other places unknown to us which are even better adapted to immediate consolidation.

Diagram No. 1 is of a district in Bexar county which has been fur-

¹There are now in Texas more than 410 Independent Districts.

nished us by Supt. P. F. Stewart, to whom we are also indebted for the following facts: "In this district five schools are at present maintained with an enrollment of 288, and an average attendance of 200. If these schools were all closed and one five-room school established at the point indicated on the diagram, three routes would need to be laid out for the transportation of pupils. One route six miles long, one seven, and one eight, as indicated in the diagram, would pass within easy reach of 80 per cent of the children needing transportation. The majority of the children would be within walking distance of the school. The roads on all routes indicated are fairly good and could be made good with but slight outlay of labor. At present six teachers are employed at a cost of \$300 per month. The quality of these schools is about on a par with average ungraded rural schools.

"The probable cost of a new five-room building would be \$2300. The five old buildings would sell for about \$800, leaving a balance of \$1500 to be met. Thirty-year 5 per cent bonds to cover this amount would cost on the average \$88.75 per year. A good principal could be secured for \$75 per month, four fair assistants for \$50 each per month. The total expenses, then, for an eight-months term would be as follows:

Tax for building	\$ 88.75.
Principal's salary, eight months, at \$75.....	600.00.
Four teachers, eight months, at \$50 each.....	1600.00.
Transportation, eight months, at \$100.....	800.00.
Repairs and incidentals	180.00.
Total	<u>\$3268.75.</u>

To meet this expense there would be the following:

State apportionment (about 400 children)	\$2000.00.
Local tax now levied	300.00.
Over and under age pupils	300.00.
Total	<u>\$2600.00.</u>

"This would leave a balance of \$668.75 to be met by local tax or subscription. The taxable values in this district are approximately \$196,000. A tax of less than five mills would raise the local tax from \$300 to \$975, thus furnishing all the funds needed to establish and maintain this consolidated school. Here we would have an eight-months school, a large, well-equipped building, a well-trained principal, a school well graded, so that the number of classes to be taught each day by each teacher would be less than half of what is now required in the one-teacher schools. Under these conditions the teachers could prepare each lesson better and teach it more effectively. Furthermore, with four assistants to teach the common school grades, the principal would be able to introduce the most substantial of the high school studies, and thus bring to the door of our agricultural population the 'Peoples' College,' which would prepare the boys and girls at their homes either for intelligent citizenship or for entrance into the higher institutions of learning. As soon as our higher institutions furnish a supply of teachers able to teach agriculture and manual training, these subjects could

easily be added to the course. Under the present plan of one-teacher schools this is impossible. There is simply no comparison between the present school work of four months in the little one-teacher schools and the work which could be done under a rational plan of consolidation.”



Diagram No. 2 representing a district in Milam County needing Consolidation of Schools.
 ■ Represents existing schools: x represents homes with children: * represents starting points for wagonette: - - - represents roads wagonette routes.

Diagram No. 2 is that of a district in Milam county, which was furnished by Supt. F. J. Clements, to whom we are indebted also for the following facts:

“In this district there are at present four schools, employing five teachers, with 195 pupils enrolled, and an average attendance of about 110. If these schools were closed and a four-room central school established at the point indicated on the diagram, much the larger part of the pupils would still be within walking distance. For those distantly located three transportation routes would suffice, one three miles, one four miles, and one four and a half miles long. The roads on all routes are fairly good.

“At present the five teachers cost \$230 per month for an average of five and a half months each year; total \$1215. Repairs and other ex-

penses bring the grand total to \$1275. This gives a five and a half months' schooling, the quality of which may be judged by the program sent. The probable cost of a new four-room central building would be \$1800. The present old buildings and school property would sell for \$600, leaving \$1200 to be met by local tax or subscription. Thirty-year 5 per cent bonds to cover this amount would cost the district on an average less than a hundred dollars per year. A good principal for the school would cost \$75 per month, and fair assistants \$40 per month. The total expenses, then, for an eight months' term of this well-graded and competently taught school would be as follows:

Tax for building	\$ 100.00.
Principal's salary, eight months, at \$75.....	600.00.
Three teachers, eight months, at \$40.....	960.00.
Transportation, eight months, at \$90.....	720.00.
Incidentals	100.00.
Total	\$2480.00.

To meet this expense there would be the following receipts:

State and county apportionment (about 195 pupils)....	\$1030.00.
Present local tax	250.00.
Pupils over and under age (probably)	200.00.
Total	\$1480.00.

"This leaves a balance of \$1000 to be met by local taxation. The taxable would raise the school funds from \$1480 to \$2480, thus giving all that is needed to put a good well-graded school with an eight months' term in place of the four little schools now struggling against hopeless difficulties for five and one-half months each year. The cost would be almost a fourth less if the school lasted only six months. In this case, however, it would not be possible to get as good quality of teachers. The advantages of the consolidated school over the present plan are so apparent and have been so often stated that I will not enumerate them here.

"Only two of the districts included in the proposed consolidated district collect a local tax at present. If the property in the four districts was assessed at one-half its market value, a four-mill tax would more than pay all expenses of a consolidated school. Since consolidation usually increases average attendance from 40 to 50 per cent, the average cost per month per pupil would be about \$1.80 per month instead of \$2.10, the present cost, thus making an actual decrease in per capita expense."

Diagram No. 3, which represents a district centering around Alvin, was furnished by Supt. R. R. Foster, to whom we are indebted also for the following facts:

"In the district surrounding Alvin there are as indicated, five public schools, one four miles from Alvin, another three, another two and a half, another one and a half, and another one and a quarter. These schools employ for six months six teachers, enroll 220 pupils, and have

an average daily attendance of about 140 pupils. If these schools were closed and all the pupils came to the Alvin schools, a large majority would be still within walking distance, and those distantly located could be transported in two wagonettes, each having a route six miles long, as indicated on the diagram. These roads are good.

"Alvin is an independent school district, with 190 white scholastic population, drawing \$950 of State funds, and with a local tax of five



Diagram No. 3 representing a district in Brazoria county surrounding Alvin, and presenting opportunities for consolidation of schools. ■ represents existing schools. * represents starting points for wagonettes. - - - represents roads and wagonette routes.

mills, yielding \$1250. It expends \$2300 per year on its schools, which are open for eight months, and employs a principal and five teachers. The school building has six rooms capable of accommodating at present 240 pupils. If the rural pupils were brought to this building, five additional rooms would be needed. This would cost, approximately, \$5000. The present rural school property would sell for about \$1500, leaving \$3500 to be raised. The cost of 5 per cent thirty-year bonds to cover this would be less than \$300 per year. No extra principal would be

needed, but three extra teachers would, at \$50 per month, cost \$1200 per year. The cost for transportation would be about \$125 per month for eight months; total, \$1000. The total extra cost above the present expenses of the Alvin schools of providing for all these pupils for eight months in Alvin then be about \$2500 per year. The cost of the five separate rural schools is now \$345 per month for six months; total, \$2070. This leaves \$430 as the total extra cost to the district for substituting eight months of a well-taught graded school for six months of our present unclassified and poorly-taught schools. The taxable values in this district outside of Alvin are about \$300,000. A local tax, then, of two mills would cover this expense."

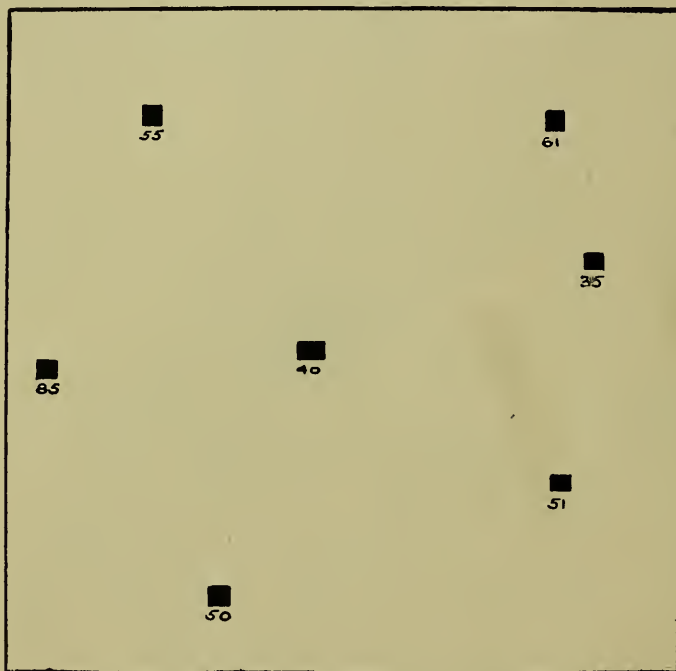


Diagram No. 4, representing an area five miles square in the northeastern part of Travis county, the black squares represent existing schools, the figures beneath indicating the number of pupils enrolled.

Diagram No. 4 does not represent exactly the present district lines, but an area in the northeastern part of Travis county five miles square. The exact lines of the present school district could not be gotten without a deal of effort that would hardly have been justified. While the present district lines would vary somewhat from this, the difference would not be enough to seriously interfere with the statements made below. We are indebted to Supt. Will Brady and to Judge Z. T. Fulmore for assistance in securing information about this district.

There are at present in this district seven schools, employing seven teachers, enrolling over three hundred pupils, with an average daily attendance of about two hundred and twenty-five. These pupils could

be better cared for by five teachers in a five-room building near the center of the district. The few pupils beyond walking distance could be conveyed to school. The new building would cost about \$2500. The present property would sell for about \$400, leaving \$2100 to be raised locally by subscription or taxes. This, in thirty-year 5 per cent bonds, would cost on an average less than a hundred and fifty dollars per year. The cost, then, of a six-months' school would be as follows:

Building tax	\$ 150.00.
Principal, six months, at \$75	450.00.
Four teachers, six months, at \$50	1200.00.
Transportation, six months, at \$100	600.00.
Incidentals	25.00.
Total	\$2425.00.

To meet this there is at present only the State apportionment of about \$2000. The district would have to raise, therefore, by local tax, \$425. The taxable property in this district is listed at about \$300,000, which at two mills tax would furnish the additional funds required to give this whole district a well-graded six-months' school. This school would be far better than the present schools, but still would have too many pupils to the teacher even when well-graded. Two additional teachers and two extra rooms would add about seven hundred dollars more of expense, but would give a good school still for less than a four-mills' tax.

As there is no central hamlet of 200 inhabitants in this district or those shown in Milam or Bexar counties, it is impossible under the present law for these people to incorporate and levy a local tax of more than two mills. In the districts fortunate enough to include a village of 200 inhabitants the law does not stand in the way of progress by preventing incorporation and taxation above two mills, but in the thousands of strictly rural districts the law, by forbidding incorporation for increased taxation, absolutely precludes the betterment of our rural schools. Our next Legislature should see that this obstacle to progress is removed.

Common school districts which can not incorporate and issue bonds must be content with consolidation in a small way, using the larger ones of the present small buildings unless they can find some one willing to trust the unsecured pledge of the district. This is done now in many cases for small amounts. Here is a fine opportunity for some one who is looking for a field for well-placed philanthropy.

If two such consolidated rural schools, costing about \$3000 each, could be started as models, the spread of the movement would be assured. We stand ready to point out such districts to any one who wishes to give this matter serious consideration.

A very limited study of the location of school houses in a few counties has disclosed a great need in many districts for consolidation of two or more small schools, without transportation. The multiplying of little half-starved schools is a great mistake which earnest school trustees should correct at once. Several places have come under our notice in which the school term could be practically doubled by simply putting two little schools into one, and even then no pupil would be at an impossible distance from the school.

Texas will never attain the prominence and power which the fertility of her natural resource and the splendid native manhood of her people merit until to native genius are added education and training. Nothing is so costly as ignorance and lack of skill. Texas can no longer afford to develop so small a portion of her vast physical and mental resources. The State with its fertile fields and immense area must ever be largely agricultural and its population rural. The men and women who will manage the farms must be educated or fall behind in competition with other sections of the country which are introducing educated and trained workers and scientific methods of work. The rural schools must furnish this education. The most economical plan, the most feasible plan, is the consolidation of the present wretched little schools into larger central schools, better equipped, better classified, better taught, to which all the boys and girls of the the whole district are brought to acquire that training and education needed to meet the ever-increasing demands made by our growing civilization.

In the increased prosperity which these educated minds and skilled hands will bring, all alike will share, whether they be farmers, land owners, merchants, workmen or professional men. Every Texan has a personal interest in pressing forward this movement for the better education of the backbone of our citizenship.

PRACTICAL EXPERIENCE

WITH

CONSOLIDATION

IN

OTHER STATES.

IOWA.

In Iowa sixty-three districts have adopted consolidation, and eighty districts have provided transportation. The most interesting case mentioned by Supt. Barrett, in his Report for 1901, is that of Buffalo Center District, in Winnebago county*. "Prior to October 1, 1897, the laws of Iowa provided that whenever the board of directors of any existing district-township should deem the same advisable, and also whenever requested to do so by a petition, signed by one-third of the voters of the district-township, it should submit to the voters of that township * * * the question of consolidation. If a majority of the votes cast were in favor of a consolidated organization, the district-township composed of subdistricts became an independent district. Acting under this statute the people of Buffalo Center township, in Winnebago county, in 1895, formed an independent district, embracing the entire civil township, six miles square, and voted bonds, running for a period of ten years, for the purpose of erecting an eight-room building.

* * * * *

"At the time the township became independent it was not proposed to close the rural schools and transport the children. This was an after consideration, and arose from the demand upon the part of the people of the rural districts for better school facilities. On August 23, 1897, the residents of what was formerly known as sub-district No. 3 requested the board to furnish transportation for their children to a central school. The request was granted and the outlying school closed. On August 30, of the same year, the board arranged for the transportation of the children in districts Nos. 2 and 4. In August 17, 1898, the board, upon petition, arranged for the transportation of children from another ward. In April, 1899, the board having noted the success with which their efforts had been attended, ordered all the rural schools in the district to be closed,

*Iowa Biennial Report of the Department of Public Instruction 1901, pages 78-80.

except those in the extreme northeastern and southeastern portions of the township.

"Contracts for years 1900-01 provided for the transportation of ninety-eight children. Six routes are laid out, and one team is provided for each. For convenience the routes are numbered 1, 2, 3, 4, 5, 6, beginning with the one running north from the central school. The greatest distance the children most remote from the central school on the different routes are conveyed is as follows:

Route 1.....	3.50 miles.
Route 2.....	4.50 miles.
Route 3.....	5.50 miles.
Route 4.....	5.75 miles.
Route 5.....	5.50 miles.
Route 6.....	6.25 miles.

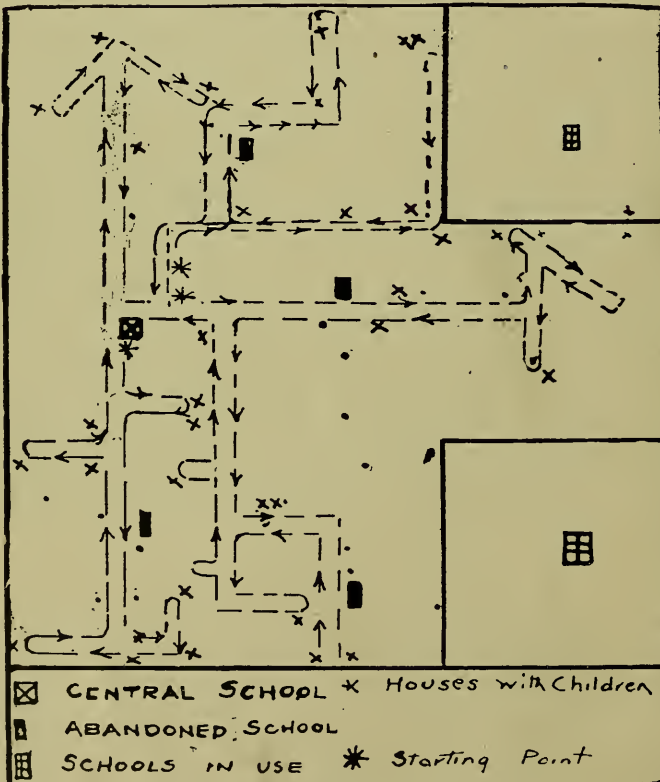


Diagram of Buffalo Center Township showing Central school and routes of wagonettes in collecting pupils.

"Winnebago county is one of the newer counties, and the roads have not been so thoroughly graded and drained as in the older sections, consequently the roads are not so good as in many parts of the State. * * *

The time required to convey children to and from the central school depends upon the condition of the roads. * * * When very muddy the drivers begin collecting the children at from 7:15 to 8:15, according to the length of the route, and return them to their homes from 4:45 p. m. to 5:45 p. m.

"The compensation paid the drivers is \$30.00 per month, except on Route 1 where only \$25.00 are paid. For this amount they are required to furnish their own properly covered, strong, safe, suitable vehicle subject to the approval of the board, with comfortable seats, and a safe, strong, quiet team, with proper harness, with which to convey and collect safely and comfortably all the pupils of the school age on the route, and to furnish warm, comfortable blankets or robes sufficient for the best protection and comfort for each and all pupils to and from the public school building and their respective homes. They agree to collect all the pupils by driving to each and all the homes where pupils reside, and to get them to school not earlier than 8:40, and not later than 8:45. They are required to drive personally and manage the team, and refrain from the use of any profane or vulgar language within the hearing or presence of the pupils, nor may they use tobacco in any form during the time they are conveying children. They are not permitted to drive faster than a trot, and are required to keep order and report improper conduct on part of the pupils to the principal or president of the board. * * * To insure the contract being kept one-half the salary is held back each month.

"In 1894 the district township was composed of six sub-districts, and required six buildings, six teachers and six sets of apparatus. * * * The average daily attendance of the entire district township for this year (six months) was 90. For the year ending September, 1900, eight teachers were employed for nine months, and the average daily attendance was 290. Estimating the average cost of tuition per month per pupil upon the total expenditure for school purposes we find it to have been \$5.03 in 1894 under the plan of separate schools, while in 1900 it was \$2.31."

INDIANA.

Supt. Frank Jones of Indiana gives in his report for 1902, an interesting account of the consolidation which has taken place in one or more groups of schools in fifty-one counties in his State. The following remarks on the Hamilton township consolidated schools are typical.

"If any one has doubts of the wisdom of the consolidation of schools he should visit this school, located just outside the small village of Royerton. * * * Here are gathered each day 192 pupils, 118 of whom are conveyed at public expense in wagons owned by the township. Seventy-four pupils belong to the original Royerton district and of course continue to walk to the school.

* * * * *

"The prices paid for drivers are as follows:

*Report of Superintendent of Public Instruction of Indiana, pages 729-735. Also *The Western Journal of Education*, pages 468-79.

Route No. 1.....	3.50 miles, \$1.00, 12 children.
Route No. 2.....	3.50 miles, \$1.00, 8 children.
Route No. 3.....	4.50 miles, \$1.25, 16 children.
Route No. 4.....	5.75 miles, \$1.60, 19 children.
Route No. 5.....	5.50 miles, \$1.60, 25 children.
Route No. 6.....	3.25 miles, \$1.25, 17 children.
Route No. 7.....	3.75 miles, \$1.25, 12 children.
Route No. 8.....	5.25 miles, \$1.50, 9 children.

"I made a personal inspection of this school on October 6, 1902. I asked the pupils to tell me what they thought of the plan, and lacked one vote of having it unanimously in favor of transportation. The one pupil who did not like it said that he could state no objections. The enthusiasm, happiness, industry and good health of the pupils were more marked than in any other rural school that I have visited. Here are gathered enough pupils to have in one class an active competition and genuine class enthusiasm. The 'hum-drum' of a one pupil class is not seen here. The collection of enough country pupils with good habits, good health, and industry, with all the graded school advantages makes here a school even better than the best city graded school. All the teachers are qualified, well trained and experienced. A music supervisor visits them once each week, and the consolidation enables the county superintendent to supervise when necessary. * * * There is also a high school department with twenty-seven pupils, four of them young men who act as drivers for the wagons, and are thus kept in school. * * * The attendance is always good, and punctuality is nearly perfect, tardiness being almost unknown. The wagons are owned by the township, and cost from \$80.00 to \$125.00 each. * * *

"The following shows the comparative cost of the two plans:

DISTRICT PLAN.

Salaries for seven teachers, seven months.....	\$2,492.00
Institute fee for seven institutes.....	124.60
Fuel for seven rooms, \$30.00 per room.....	210.00
Supplies for seven rooms, \$10.00 per room.....	70.00
Repairs for seven rooms, \$20.00 per room.....	140.00
Total.....	<u>\$3,036.60</u>

CONSOLIDATION PLAN.

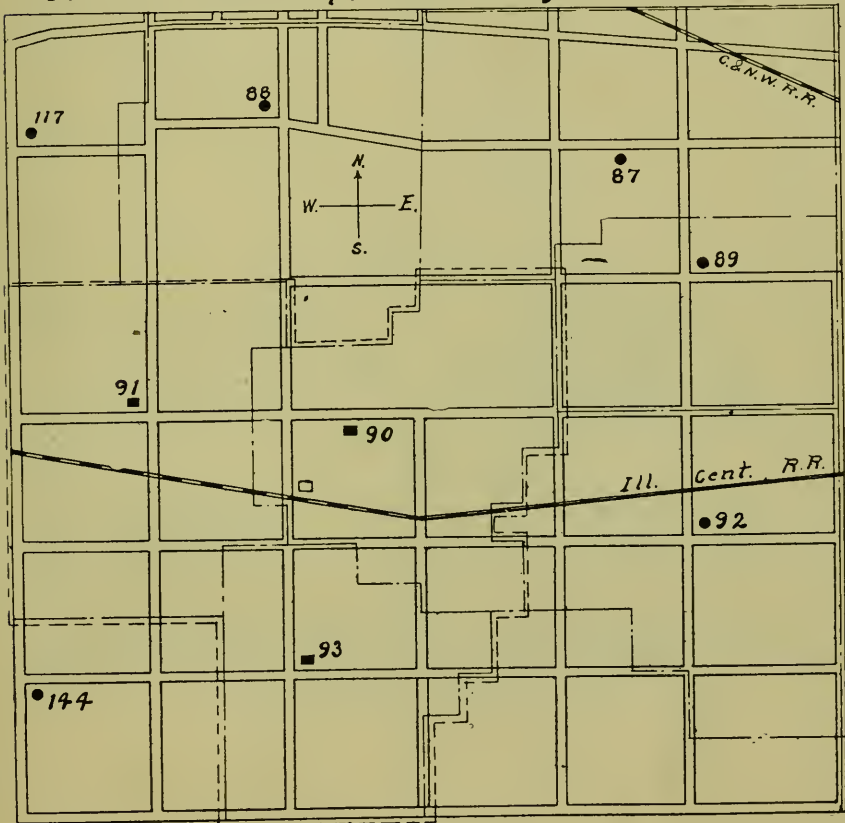
Salaries for four teachers, seven months.....	\$1,442.00
Institute fee for seven institutes.....	72.00
Fuel for four rooms, \$30.00 per room.....	120.00
Supplies for four rooms, \$10.00 per room.....	40.00
Repairs for four rooms, \$20.00 per room.....	80.00
Transportation at \$8.87 per day.....	<u>1,225.00</u>
Total.....	\$2,979.00
Difference in favor of consolidation.....	\$ 57.50

OHIO AND ILLINOIS.

O. T. Carson, State Commissioner of Common Schools, in his report to the Governor of Ohio for 1896 says: "The expense of schooling the children has been reduced nearly one-half, the daily attendance has been very largely increased and the quality of work done has been greatly improved."*

Supt. O. J. Kern of Winnebago county, Ill., after an inspection and study of the consolidated schools of Ohio introduced consolidation into his own county. The following is taken from the report which he made after this visit and inspection:

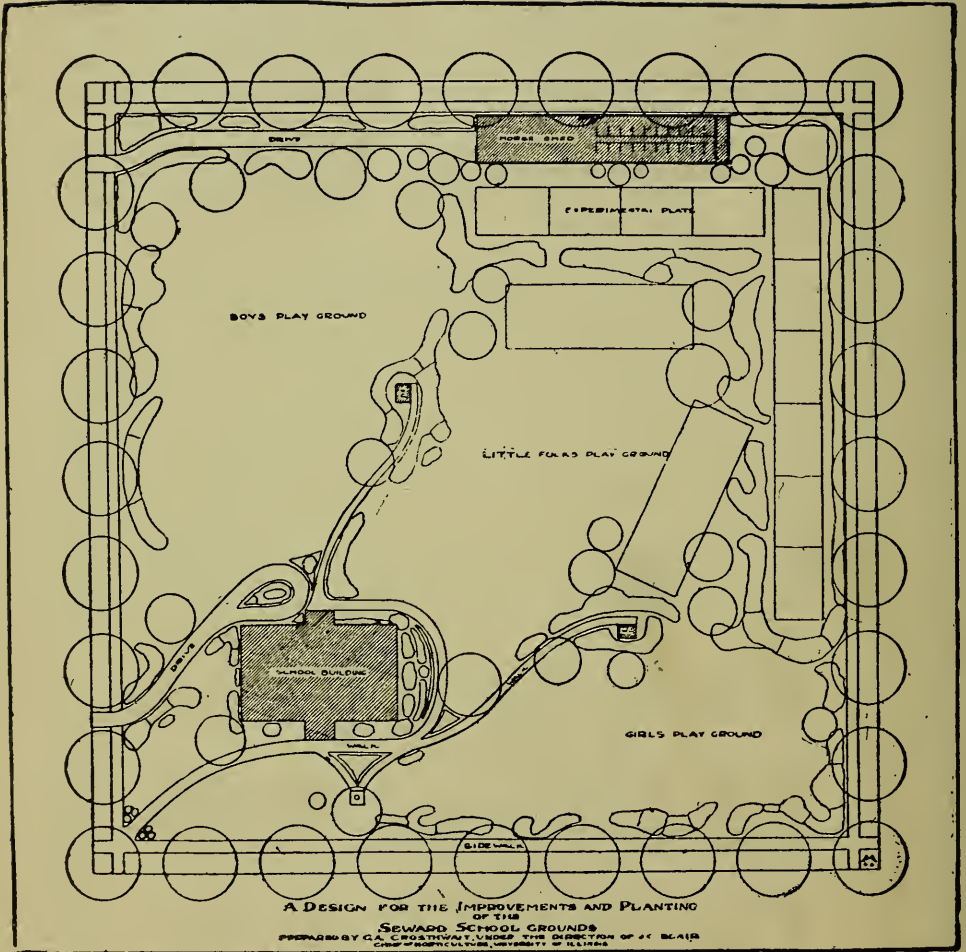
Seward Township, Winnebago Co. Ill.



- Abandoned school buildings.
- New central school building.
- Remaining district school buildings.

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

* *Western Journal of Education*, page 427.



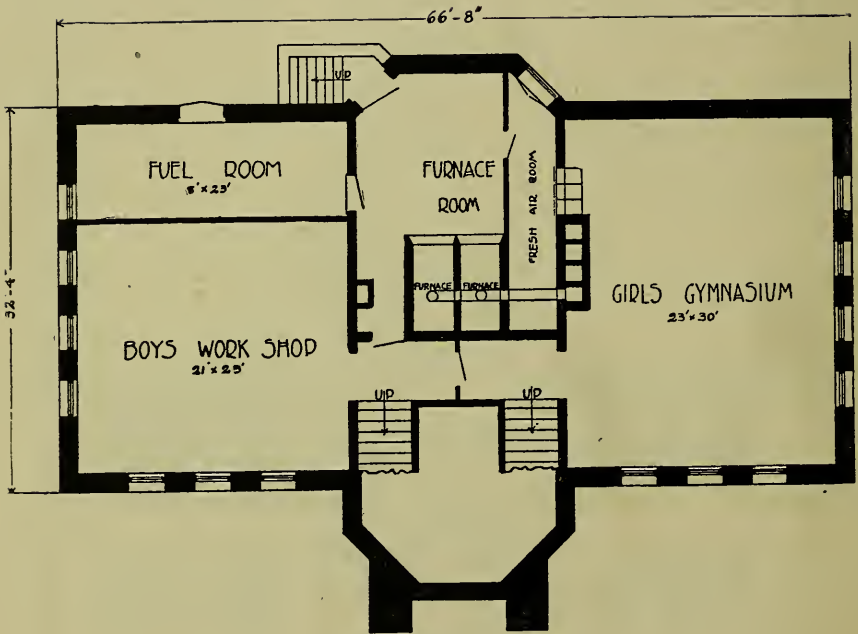
(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

CONSOLIDATED SCHOOL
AT SEWARD
WINNEBAGO CO = ILL.



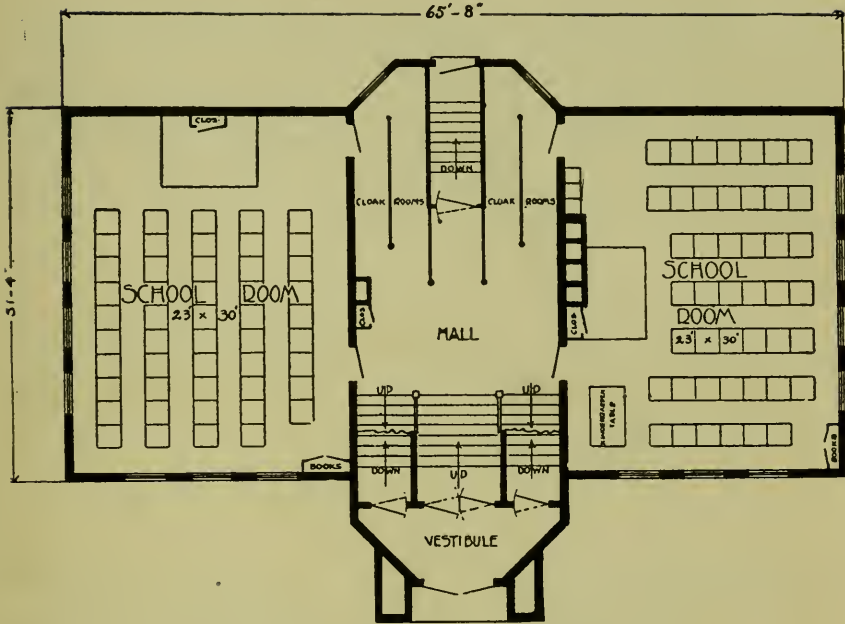
FRONT ELEVATION

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

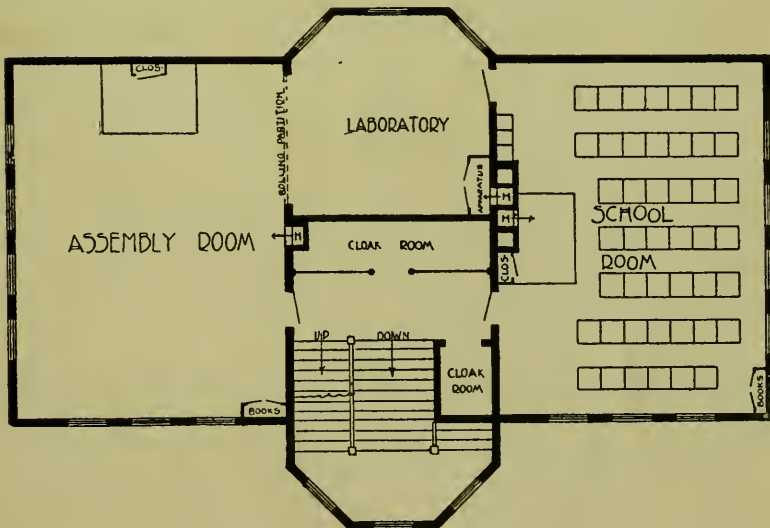


BASEMENT PLAN

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

"The first place we visited was Perry, Lake county, where there is a Township High School. The principal, Prof. Morrison, is a pioneer in the matter of centralization. He assured us that the experiment was no longer an experiment, that the new movement was the logical solution of the country school problem, and that centralization of districts with transportation of pupils had come to stay. It gave much better schools with but a slight, if any, increase in the cost to the township. The opposition to the plan has long since died out. This has been the testimony at every place visited thus far. * * *

MADISON TOWNSHIP.

"Madison township, Lake county, presents an excellent illustration of what may be called partial centralization, that is a grouping of two, three or four schools into one without attempting to bring all the schools to the geographical centre of the township. The latter method would not be practical because of the shape of Madison township. It is nine miles long and five miles wide. * * *

THE KINGSVILLE SCHOOL.

"As to the result of the Kingsville experiment, I can do no better than to quote from the *Arena* for July, 1899.

"* * * The residents of the sub-districts of Kingsville township which have adopted this plan would deem it a retrogression to go back to the old sub-district plan. It has given the school system of Kingsville an individuality which makes it unique and progressive. Pupils from every part of the township enjoy graded school education, whether they live in the most remote corner of the township or at the very doors of the central school. The line between the country bred and the village bred youth is blotted out. They study the same books, are competitors for the same honors, and engage in the same sports and pastimes. This mingling of the pupils from the sub-districts and the village has had a deepening and broadening influence upon the former without any disadvantages to the latter. With the grading of the school and the larger number of pupils have come teachers of a highly educated class. Higher branches of study are taught, the teachers are more conversant with the needs of their profession. The salaries are higher; the health of the pupils is preserved, because they are not compelled to walk to school in slush, snow and rain, to sit with damp and perhaps wet feet in ill-ventilated buildings. Nor is there any lounging by the wayside. As the use of indecent and obscene language is prohibited in the wagons all opportunities for quarreling or improper conduct on the way to and from school are removed. The attendance is larger, and in the sub-districts which have taken advantage of the plan it has increased from 50 to 150 per cent. in some cases; truancy is unknown. It has lengthened the school year for some of the sub-districts; it has increased the demand for farms in those sub-districts which have adopted the plan, and real estate therein is reported more saleable. The drivers act as daily mail carriers. All parts of the township have been brought into closer touch and sympathy. The cost of maintainance is less than that of the schools

under the sub-district plan; the township has had no school houses to build; it has paid less for repair and fuel. Since the schools were consolidated the incidental expenses have decreased from \$800 to \$1100 per year to from \$400 to \$600 per year. In the first three years following its adoption Kingsville township actually saved \$1000.*

"Prof. York, superintendent of the above mentioned Kingsville school, says, concerning the system of consolidation: 'The best physical laboratory in America is the well regulated American farm. Here the boys and girls study nature first hand. Here they observe the growth and life of plants and animals. Here they breathe pure air, become familiar

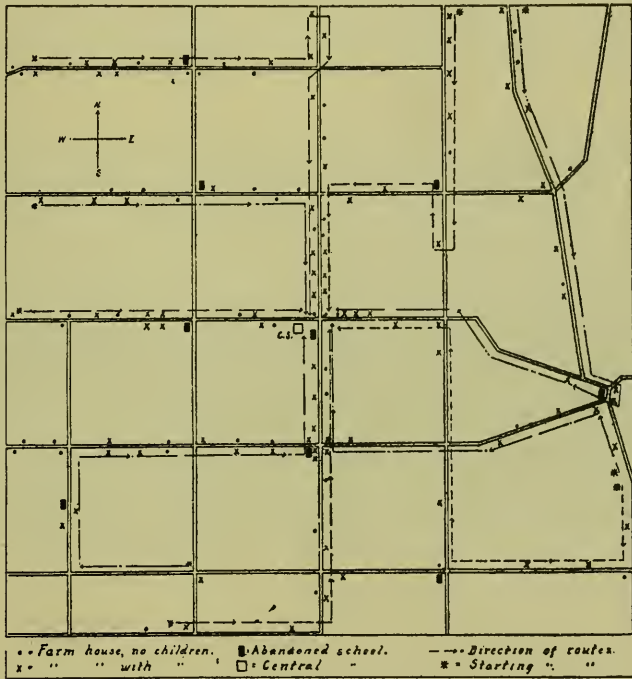


Diagram of Gustavus Township showing the central school and transportation routes.

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

with the beauties and wonders of the natural world. Here they make character. To have added to all these opportunities the advantages of a high school education without any of the disadvantages that attend the spending of evenings without chores or home duties in the town is an educational condition that is almost ideal.*

GUSTAVUS AND GREEN TOWNSHIPS.

"We wished to find centralized schools in a purely country township, where there was no village or village school, a place where country life

**Western Journal of Education*, June, 1903, page 428.

was being preserved. We went thirty-five miles south of Ashtabula, and visited Gustavus and Green townships in Trumbull county. The first place visited was Gustavus. This township is exactly five miles square, as are all the townships of the Western Reserve, with the exception of those along the shore of Lake Erie. In Gustavus township the town hall is situated exactly in the center of the township, as is the case in Green township. Here was a church, a country store and post office, and a few houses.

"I had a picture of the centralized school of Gustavus, and was anxious to see the real thing. We saw it, and all was as represented. The school building is located in the center of the township. The school has been in operation two years. It is a four room school, having a principal and three assistants. All the children of the township are brought to this central school, and nine wagons are employed in the transportation.



Wagons used in the transportation of children, Gustavus township, Trumbull Co., Ohio.
(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

"The wagons are provided with curtains, lap robes, soap stones, etc., for severe weather. The Board of Education exercises as much care in the selection of drivers as they do in teachers. The contract for each route is let out to the lowest responsible bidder, who is under bond to fulfill his obligations. The drivers are required to have the children on the school grounds at 8:45 a. m., which does away with tardiness, and to leave for home at 3:45 p. m. The wagons call at every farm house, where there are school children, the children thus stepping into the wagons at the roadside and are set down upon the school grounds. There is no tramping through the snow and mud, and attendance is much increased and far more regular. With the children under the control of responsible drivers there is no opportunity for vicious conversation or the terrorizing of the little ones by some bully as they trudge homeward through the snow and mud from the district school.

"During the school year 1898-99 there were enrolled in the grades below the high school eighty-two boys and fifty-two girls; in the high

school room seventeen boys and thirty-five girls; making a total in the building of 186 pupils. * * *

"Keep in mind that this school is not in a village and the children are scattered over twenty-five square miles of territory. The children are not tardy. * * * Any one who stands in that building, looks at those children and wagons, must be convinced that here is the solution of the country school problem. Because this problem is being solved in the country over six miles from the railroad. There is an organ in every room, and the walls are decorated with pictures. They have started a library. In the high school room were fifty-two enrolled, with fifty present. Here was an opportunity for the big boys on every farm to get higher education and still be at home evenings, secure from the temptations and dissipations of city life. They rode home in the wagons with the children of the lower grades and thus were able to be of service on the farm.

"The building is a frame structure, erected at a cost of \$3,000. It is heated by steam. The principal gets \$80 per month. * * * The drivers receive respectively \$22, \$30, \$18, \$25, \$30, \$32, \$16, \$30, and \$17 per month, making an average of \$1.25 per day. Before the adoption of the centralization the average daily attendance was 125 pupils. It has increased to 144 at the end of the second year, and the principal told us the attendance is increasing all the time. Before the schools were centralized the cost for the entire township was \$2,900. Now it is only \$3,156, being an increase of only \$256 annually. And as to the character of the school, who will claim that the nine scattered schools were doing the work of a well graded four room school? There is absolutely no comparison. In order to keep up the school and pay off the school bonds, the Township Board of Education made a levy of nine mills on a valuation of \$373,000. There was opposition to the plan at first. * * * Those who were opposed to centralization of schools frankly acknowledge their mistake, and are found among the staunch supporters. We have found this true at every place we have visited.

"A special committee was sent from an adjoining county to investigate the Gustavus school. The committee was composed of one person opposed to the system and one in favor. They traveled over the township and talked to the people as we did. In their report, out of fifty-four families interviewed only one person with children was opposed; seven of those in favor were formerly strongly opposed, while none that were first in favor of the system are now opposed. The same committee adds: 'Although the system costs a little more (the belief is that it is cheaper after building is paid for), yet the people, as a whole, are highly pleased and are very enthusiastic and proud of their schools. Several of the neighboring townships, after carefully watching the system, have decided to centralize, and the growing opinion is that centralization is in harmony with educational progress.'

"The committee's report is certainly correct. Bear in mind, the roads in this township are but a trifle, if any better than the average of Winnebago county. In fact, two or three townships of our county have, as a whole, better roads. The people are simply determined to have better schools and will not allow obstacles to remain in the way of their children's fullest and freest development, even if it does cost a few hundred

dollars more per year for the entire township. * * * The average tax payer would not know it. The testimony has been that after the new school building has been paid for that there is an actual saving per capita of children of school age in the township. Then think of the superior value of the new school over the old. It can not be a question of a few hundred dollars.

"While we were at the Gustavus school the principal advised us to drive five miles to the west into Green township, where the people had centralized and put up a fine new brick building at a cost of over \$6,000. The people of Green township had watched the school in Gustavus township for two years, and believed so thoroughly in the new plan that at the last April election they voted to centralize and bond the township for a long term to erect a new building. The vote was overwhelmingly in favor of the new school.



Central School, Green Township, Trumbull County, Ohio.

(Courtesy of Supt. O. J. Kern, Rockford, Ill.)

"This building stands in the center of the township in a community distinctly country. There is no village beyond a store and post office, a town hall, a church or two, and a few dwellings. It is eleven miles from one railroad and six miles from another. It was built in 1900 at a cost of \$6,000. There are six school rooms with two additional, one of which may serve as a library, and the other as an office and reception room. There is a basement under the entire building, part of which may be utilized for laboratory and gymnasium. The building is heated by steam.

"To this building are brought all the children of the entire township. The superiority of the educational influence of such a building over that of eight or nine widely scattered, neglected district buildings is beyond controversy, to say nothing in the way of sanitary improvement, in the way of seating, lighting, heating and ventilation. Such a building may be had in hundreds of townships of Illinois. It would not be

a burden to any of the taxpayers of any township of Winnebago county. Bonds could be issued for thirty years' time, money could be borrowed at 4 per cent. The annual interest on \$6,000 at 4 per cent. would be \$240, an amount no larger than the repairs of seven or eight district school houses from year to year if kept up as they should be. One-thirtieth of the principal, or \$200 plus the annual interest, \$240, would make a total cost of \$440 for building purposes for the first year, decreasing every year afterwards as bonds were paid off. * * *

"They began this school in September last. The enrollment is 180, over 150 of last year in the scattered schools. Four teachers are employed. All children of the township are brought to the school, and eight wagons are employed in the transportation. The campus has about three acres. Shade trees, school decoration, library, etc., will come. How that school can be made the social, literary and musical center of the entire township! What an inspiration it must be to a corps of teachers to work in such a community as that.

"In the primary room were all the little ones of the entire township in a beautiful room, while in the high school room were many large farmer boys getting an education they could not otherwise gain."

TRANSPORTATION CONTRACTS.

An idea of the method employed in letting contracts for transportation of pupils can be gotten from the following forms which are employed in Madison township, Lake county, Ohio,[†] and La Gange county, Indiana.

NOTICE TO BIDDERS.

Bids for the transportation of pupils of the Madison township schools, over the following routes, will be received at the office of the Township Clerk until Friday, July 24, at 12 m.:

Route A. Beginning at county line on North Ridge road, and running west on said road to school house in District No. 12.

Route B. Beginning at Perry Line on the North Ridge road, and running east on said road to school house in District No. 12.

Route C. Beginning on Middle Ridge road, at residence of N. Badger, running thence west on said road to the residence of Rev. J. Sanford, thence north to school house in District No. 12.

Route D. Beginning at Perry Line on River road, and running thence east on said road to school house in District No. 6.

Route E. Beginning at the Hartman farm, thence by Bennett road to Chapel road, thence east to A. R. Monroe's, thence west on Chapel road to school house in District No. 13.

Route F. Beginning at residence of J. H. Clark, and running east on Chapel road to school house in District No. 13.

All whose bids are accepted will be required to sign a contract by which they agree:

1. To furnish a suitable vehicle with sufficient seating capacity, to

[†]Copied here from the *Western Journal of Education*, June, 1903, pages 491-2.

convey all the pupils properly belonging to their route, and acceptable to the Committee on Transportation.

2. To furnish all necessary robes, blankets, etc., to keep the children comfortable; and in severe weather the conveyance must be properly heated by oil stoves or soap stones.

3. To provide a good and reliable team of horses, and a driver who is trustworthy, and who shall have control of all the pupils while under his charge, and shall be responsible for their conduct. Said driver and team to be acceptable to the Committee on Transportation.

4. To deliver the pupils at their respective schools not earlier than 8:30 a. m., nor later than 8:50 a. m., and to leave at 4:05 p. m. (sun time).

Each contractor shall give bond for the faithful discharge of his contract in the sum of \$100, with sureties approved by the president and clerk of the board.

The committee reserves the right to reject any and all bids.

By order of the committee,

C. G. ENSIGN, Clerk.

SCHOOL CONVEYANCE CONTRACT.

.....Township, Lagrange county, Indiana.

This article of agreement made and entered in to this.....day of 190..., by and between....., of Lagrange county, in the State of Indiana, and.....School Township, in the said county and State.

Witnesseth, That the said.....party of the first part, doth hereby agree to and with the said.....School Township, party of the second part, as follows, to wit:

That the said.....will convey by spring hack all children herein stated..... and such other children of school age whose parents may later reside on the route or in the district.

The transportation route shall be as follows:

.....
.....

The said party of the first part further agrees to arrive at..... between....a. m. and....a. m., standard (sun) time and to leave said school house promptly at the close of each day's session and convey the foregoing pupils to their respective homes as expeditiously as possible in the same general manner as in the morning. He shall strictly prohibit profane or obscene language and boisterous conduct in or about the hack. The said party of the first part further agrees not to use tobacco while in charge of the children, neither will he permit its use by any pupils while in his custody. The pupils shall be conveyed with due regard to their comfort, and the team shall not only be safe but reasonably speedy.

(Additional considerations.)

.....

The services of the said party of the first part shall commence on the day of.....190.., and continue throughout the school year for such days as the school shall be in session.

The said party of the first part (or second) shall provide a comfortable and safe conveyance, and said vehicle shall be so constructed that it can be entirely closed during inclement weather.

(Additional considerations.)
.....

The said party of the second part in consideration of the prompt fulfillment on the part of the party of the first part contracts and agrees to pay.....dollars per day for services rendered as above stated.

In case party of the first part fails, neglects or refuses to faithfully do and perform each and every one of the covenants and agreements herein specified on his part to be performed, then this contract shall be null and void at the option of the party of the second part, and the party of the second part may immediately bring suit on the bond annexed hereto for any damages sustained to the party of the second part by reason of the failure of the party of the first part to perform his covenants and agreements herein contained.

In Witness Whereof, the above named parties have signed the above contract this.....day of.....190..

Party of first part,.....

Party of the second part,.....

By.....Trustee.

Know all men by these presents, That we,..... and.....are held and bound to the State of Indiana, in the sum of.....dollars, for the payment of which we do bind ourselves jointly and severally. The condition of this obligation is such that we do hereby guarantee the full performance of all conditions specified in said contract on the part of said..... to be kept.

Now if the said.....shall faithfully fulfill all the requirements mentioned, then this obligation to be void, otherwise to be and remain in full force.

Witness our hands and seals this.....day of.....190..

.....(Seal.)

.....(Seal.)

State Superintendent Frank L. Jones of Indiana says, concerning the matter of transportation contracts: "I am not in favor of letting contracts for conveying pupils. It is not a matter which can be lumped off to the lowest bidder. It would be as sensible to employ teachers upon this basis. The law does not contemplate that the contracts for transportation should be made in this way. It is entirely proper for a trustee or advisory board or both to fix the amount that will be paid and then select the best man for the work at that price."

FLORIDA.

In Florida consolidation has been established in seventeen out of

forty-four counties, and many more are favorable to it. The following by Supt. Glenn of Jacksonville is the best account* found:

"Wisconsin and Mississippi and North Carolina write to Florida seeking our experience and method of transportation in Duval county, in connection with our centralization of rural schools during the last six years.

"In this county six years ago there were forty-five rural schools of one teacher each, for white children, established by former administrations. The work of these schools was so unsatisfactory in general, and the per capita of expense ran so high in many of them, that the present administration determined to reduce the number to fifteen of three teachers each.

"A statutory clause of the State provides that school children must not be required to walk to school more than one mile and a half. Hence, in choosing the sites for the centralized schools, the one having the greatest number of children within a radius of one mile and a half has generally been chosen. Seven of these schools are now in operation, each accommodating the children of about sixty to one hundred square miles of territory. Others will be established as rapidly as funds will permit.

"The concentration of the children who live more than one mile and a half from these new schools is accomplished by means of wagonettes, specially designed for the purpose, and provided by the Board of Public Instruction at the public expense. They are of such capacity as to carry eight, ten, twelve, fourteen, sixteen, eighteen and twenty pupils, respectively, and cost from seventy to one hundred dollars each. Last year twenty-seven of these comfortable vehicles were running at an average cost of \$23.33 $\frac{1}{3}$. These twenty-seven vehicles enabled us to close twenty-four of the old one teacher schools, the current cost of which had previously been forty-five dollars and fifty cents per month for each. Hence our transportation system now in operation produces a current saving of four hundred and sixty-two dollars per month over the old method. This gross saving was reduced by two hundred and twenty-five dollars, the increase in salaries for assistant teachers at the centralized schools, and there was still left a net saving of two hundred and thirty-seven dollars per month. During a single term of eight months this net saving amounts almost to the entire cost of the twenty-seven wagons, and since the life of a well made wagon is about five years, four-fifths of this saving can be devoted to the extension of the new system and to better facilities for teaching. Therefore, even in a financial way, centralization in Duval county, Florida, is a decided success.

"Professionally there seems to be nothing objectionable, and of the many advantages the following are the more important:

"1. The teachers' work is so well organized that the average recitation period is doubled.

"2. The effort of the teacher is made more effective by means of adequate equipment.

"3. Truancy is wholly eliminated. The health of the pupils is preserved against bad weather and worse roads, but especially from the impure drinking water of former days.

"4. Many children, formerly so isolated as never to have access to

*Annals of the American Academy of Social and Political Science. Sept., 1903, pages 14-16.

any school, are now accommodated, to the advantage of the system* financially.

"5. Local prejudice and family feuds are so completely submerged that one or two large families can not freeze out the teacher.

"6. As a sequence to all these favorable conditions the average attendance is increased $12\frac{1}{2}$ per cent, giving a corresponding increase of school funds from the State.

"7. The country maiden may, and does, continue her education even onto the appreciative days of womanhood, without fear of molestation by the ubiquitous tramp or vagabond.

"8. The youth prolongs his school days to the ambitious verging into manhood, because his aspirations for intellectual progress have been encouraged—he has been given time and opportunity to think and to talk.

"9. The farmer and his family are becoming more content with their independent, self-sustaining occupation, preferring to have their children educated in the efficient rural schools, where, during the character-forming period of youth, ethical culture is free from the dissipations of social life as manifested in our cities.

"10. The development of the art of teaching by young aspirants is more feasible to the superintendent. His efforts at supervision are more frequent and more effective."

Ellis Geiger, superintendent of Clay county, says: "In the past two years the number of schools in the county has been decreased from fifty-one to forty-one. This has been done by merging five schools into one in one case, three into one in two instances, and two into one in two cases. In order to do this it has been necessary to transport some of the most distant pupils. The entire current expense per month of the larger schools thus created, including transportation and increased salaries, is about one hundred dollars less than that of the little schools which existed before. By this consolidation the attendance has been considerably increased and more efficient teaching has been made practicable. This educational movement is coming into favor with the people. (Biennial Report of Superintendent of Public Instruction for Florida, 1902, p. 253.)

MASSACHUSETTS.

In the year 1893 Seymour Rockwell, the veteran school committee man of Montague, Mass., said: "For eighteen years we have had the best attendance from the transported children; no more sickness among them, and no more accidents. The children like the plan exceedingly. We have saved the town* at least six hundred dollars a year."†

In Massachusetts, in response to a circular of inquiry, "60 per cent of the town report the cost as less, but the results better; 15 per cent cost the same but the results better; 8 per cent cost more but results better; 8 per cent cost more but results not stated; 8 per cent cost less but results not stated."‡

*A "town" in Massachusetts corresponds to a township in other states.

†*Western Journal of Education*, June, 1903, page 458.

‡G. T. Fletcher in *Western Journal of Education*, June, 1903, page 462.

AUSTRALIA.

In Victoria, Australia, under the system of conveyance, 241 schools have been closed. The saving in closed schools amounts to about \$71,000 per annum. The attendance is so regular and the system so popular that applications are constantly made for its extension.”||

BIBLIOGRAPHY.

Fuller information concerning consolidation of schools may be found by consulting the following:

The Western Journal of Education June, 1903. (723 Market Street, San Francisco, Cal. Price, 15 cents.) This is a Special Number devoted to Consolidation of Schools, and gives an exceptionally good collection of reports and articles on this subject.

Report of the United States Commissioner of Education, for 1902, Vol. II, pp. 2353-2369. This article contains a brief list of the best State reports on consolidation, together with selected quotations and other information.

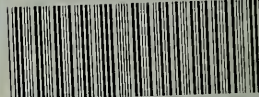
Proceedings and Addresses of the National Educational Association, for 1903, pp. 919-935. The first of the two articles in this volume contains a very full bibliography of the subject.

||*Western Journal of Education*, June, 1903, page 436. Quoted from Report of Minister of Public Instruction for Victoria, Australia.

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